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Point Reyes

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PACIFIC WEST REGIONAL OFFICE Memorandum, 6 -

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Memorandum

To:

Superintendent, Point Reyes National Seashore

From:

Regional Director, Pacific West Region

Subject:

Environmental Compliance for Coastal Watershed Georgiophic Constant

Wilderness Restoration

The revised Finding of No Significant Impact (FONSI) for geomorphic site restoration in and adjacent to Wilderness is approved. To complete this particular compliance effort, the park should send its notice of the decision (and copies of the FONSI) to permitting agencies and those parties that commented or consulted on the supporting environmental assessment.

The Seashore's proactive efforts at continuing to identify and remove non-conforming structures from Wilderness and restore topography and natural watershed processes serve as an excellent program for other parks to emulate - congratulations to you and your staff for these initiatives!

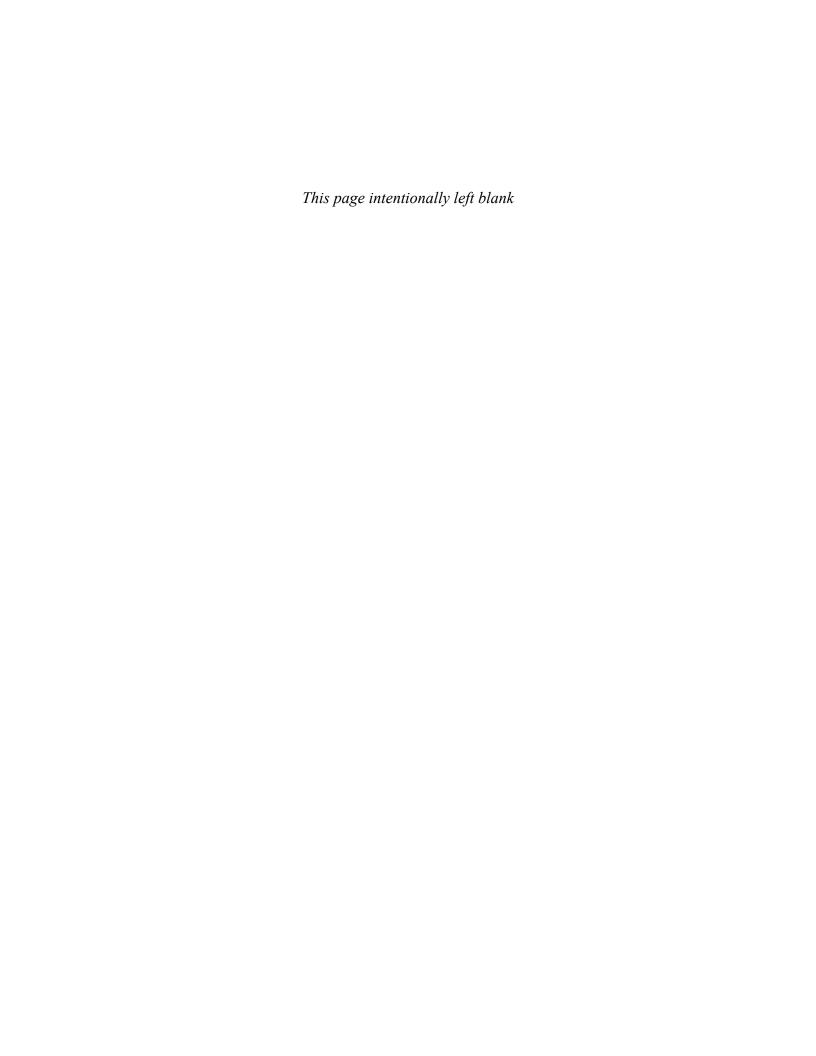
Jonathan B. Jarvis

Attachment

CC: PWR-DRR KWOCD ACOE USPWS

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(11/9/06)



# U. S. Department of the Interior National Park Service Point Reyes National Seashore

# Finding of No Significant Impact Coastal Watershed Restoration – Geomorphic Restoration Project

#### Introduction

The Coastal Watershed Restoration Project is a Line-Item Construction funded project addressing nine sites within the Drakes Estero Watershed. Separate Environmental Assessments were prepared for this Geomorphic Restoration Project and the nearby Drakes Estero Road Crossing Improvement Project. Although separate conservation planning and environmental impact analysis efforts were undertaken, each analysis process duly considered cumulative effects of the other initiative as well as other applicable projects.

The National Park Service (NPS) has completed an Environmental Assessment process for ameliorating the effects of two water impoundments and one road crossing site within the Drakes Estero Watershed. This Finding of No Significant Impact (FONSI) is based on the environmental impact analysis documented in the *Coastal Watershed Restoration – Geomorphic Restoration Project EA*, November 15, 2004, which documents analysis of potential impacts of each alternative considered and a complete description of the Selected Action which the decision set forth here is based. The EA and this FONSI represent the completed NEPA documentation for replacement and improvement activities at the three project locations.

Point Reyes National Seashore proposes removal of facilities and restoration of natural hydrologic and shoreline process at three locations in the Drakes Estero Watershed. Project areas include the Glenbrook Road Crossing, a non-conforming structure in the Philip Burton Wilderness, Muddy Hollow Dam and Limantour Beach Pond Dam, both constructed across portions of Estero de Limantour. The proposed project area is located on land adjacent to and within the Philip Burton Wilderness Area of the Seashore. Treatment proposed at these locations is intended to reduce or eliminate the long-term maintenance requirements associated with the existing earthen fill structures. Many of these facilities are beyond their design life, and are either not compatible with current land use designations (e.g., Wilderness areas) or are in imminent danger of catastrophic failure.

## **Project Need**

In conjunction with NPS management objectives, the project is proposed to enhance or restore natural hydrologic and shoreline process and fish passage through these structures located in the downstream to estuarine portions of Glenbrook, Muddy Hollow, and Laguna Creek. Prior to acquisition of the land by the NPS, a network of roads and other infrastructure was constructed to support existing agricultural operations and planned residential development. Many of the existing road and drainage facilities were installed prior to park establishment. Since the Seashore was established, the NPS has continued to manage many of the remaining roads, drainage facilities, and other infrastructure.

Many of these facilities are not compatible with land use designations (including Wilderness) within the Seashore. To this end, the NPS has been developing a number of projects aimed at removing dams, replacing culverts, and regrading ranch roads to facilitate natural process and conditions. The project sites are located within or adjacent to the Philip Burton Wilderness Area of the Seashore. The treatments at these locations is intended to restore natural hydrologic and ecological process while reducing or eliminating the long-term maintenance requirements associated with the existing earthen fill structures.

- The project is needed to restore natural hydrologic conditions and increase estuarine habitat at Point Reyes National Seashore. At each of these sites, construction across stream or estuarine habitat impedes natural process and is not consistent with long-term park and NPS management objectives. These sites impede or block access to watersheds that support, or have the potential to support federally threatened coastal California steelhead and coho salmon. Muddy Hollow Dam and Limantour Beach dam restrict tidal action from more than five acres of coastal marsh habitat. The Glenbrook crossing is a non-conforming structure within the Philip Burton Wilderness and is a barrier to fish passage.
- The project is needed to reduce the maintenance demands at Point Reyes National Seashore. The project addresses facilities within the Drakes Estero watershed that are in need of maintenance, but not considered integral to current park operations. These facilities are in need of extensive maintenance to stabilize structures, and in the long-term, would require regular maintenance. For example, the Bureau of Reclamation identified the Muddy Hollow Dam to be in "seriously deficient condition and consideration should be given to deactivating the dam and restoring the tidal pool area" (USBR 2001). With numerous high priority maintenance needs, it is likely the facilities would continue to deteriorate. This project is proposed to address long-term maintenance issues at this site, and includes alternatives that would reduce the overall operations and maintenance requirements for these facilities.
- The project is needed to eliminate the risk of catastrophic failure. Maintenance activities are necessary to prevent catastrophic failure at Glenbrook Crossing and Muddy Hollow Pond. The culvert at Glenbrook Crossing (within the Philip Burton Wilderness Area) is eroded and bowed, with water piping around the metal culvert. The outfall of the culvert is 11 feet above the bed of the creek, and is a total barrier to aquatic movement. Catastrophic failure is likely, and could result in large volumes of sediment entering the stream system and result in effects to natural resources. At Muddy Hollow Pond, more than 30 acre-feet of water are stored behind the dam facility. Catastrophic failure would result in loss of pond, estuarine, and upstream wetland habitat.
- The project is needed to increase sustainability, both operationally and ecologically within these small coastal watersheds. These facilities were constructed prior to park establishment and not sustainable, requiring maintenance actions in order that they remain a part of the environment. The project would remove these facilities in a controlled manner thereby improving natural process and sustainability of the park systems.

## **Project Purpose**

The project addresses facilities constructed prior to establishment of Point Reyes National Seashore. These facilities are not integral to park operations but require repair or replacement in the short term, as well as long-term maintenance for them to remain. The primary goal of the proposed habitat restoration project is to reduce long-term maintenance requirements and increase ecological sustainability through the restoration of natural hydrologic and shoreline process to these sites within the Drakes Bay watershed. The current PRNS General Management Plan (NPS 1980) and Statement for Management (NPS 1990) identify objectives for the management of natural and cultural resources. The PRNS Statement for Management sets the primary resource management objectives for PRNS as the identification, protection, perpetuation, and restoration of significant cultural and historic resources and of the diversity of natural ecosystems representative of the California coast (NPS 1993). Restoration of water resources and aquatic habitat have been identified as high priority objectives by the NPS in the PRNS General Management Plan (NPS 1980), the PRNS Resource Management Plan (NPS 1999), and the NPS Management Policies (NPS 2001).

The objectives of the Coastal Watershed Restoration Geomorphic Restoration Project are:

- To reduce or remove the long term operations and maintenance requirements associated with each of these park facilities.
- To increase ecological sustainability through the removal of structures that impede or restrict natural hydrologic, estuarine, and shoreline process within the Drakes Estero/Estero de Limantour watershed.
- To address the non-conforming Glenbrook road crossing structure located within the Philip Burton Wilderness and create a sustainable wilderness trail to maintain through visitor access.
- To address deficiencies and impacts to natural hydrologic and estuarine process associated with the Muddy Hollow Dam within Estero de Limantour, and create a sustainable visitor access through the site.
- To replace the Limantour Beach Pond Dam and associated fill with a structure that remains a
  gateway to Limantour Beach, while allowing for the restoration of natural hydrologic and
  shoreline process within Estero de Limantour.

Summary of the Alternatives, Preferred Alternative, Environmentally Preferred Alternative
The three alternatives analyzed in this EA include two "build" alternatives (Alternative 1 and Alternative
2) and the "no-build" alternative or No Action Alternative. To achieve the most complete analysis of
potential environmental effects, the build alternatives analyzed in the EA represent a spectrum from a
"full-build" approach, with more extensive earthwork and construction at all sites (Alternative 1), to a less
intensive "partial-build" approach (Alternative 2). To provide the greatest flexibility in implementation,
the alternatives were designed to be modular, such that each site-specific component could be
implemented independently, depending on what is identified as most likely to be both successful and
cost-effective for each site. NPS has elected a combination of Alternative 1 ("Full-build") and Alternative
2 ("partial build") as its preferred alternative. It should be noted that this combination is also identified in
the EA as the *Environmentally Preferred Alternative*. The NPS has selected the preferred alternative as
the Selected Action. The components of the preferred alternative are summarized below.

Generally, the preferred alternative treatments at each site reflect the location and land use management in the area. The full-build treatments at Muddy Hollow and Limantour Beach Marsh involve equal levels of work and result in similar function as the partial build treatments. However, under Alternative 1, they are timed for a single treatment (Muddy Hollow) or would involve a different type access to the beach (Limantour Beach Marsh). In the case of Glenbrook Crossing, the limited treatment was selected over the full-build (fully engineered) solution because of its location within the Philip Burton Wilderness. The limited treatment is intended to remove the anthropogenic impediments to natural function and set the stage for natural process ultimately to shape the final outcome and function of the project area.

Comments by the public and consulting agencies were considered in analyzing the preferred alternative from the EA and in reaching this decision. Comments from the regulating agencies, specifically US Fish and Wildlife Service and the National Marine Fisheries Service have been incorporated into the Selected Action. The US Fish and Wildlife Service Biological Opinion includes further detail for actions to be conducted that would mitigate impacts of the project on California red-legged frog habitat. In addition, the National Marine Fisheries Service Biological Opinion recommended construction methods to minimize impacts of pile driving on aquatic species at the Limantour Beach Marsh site. It should be noted that these construction activities will take place during the construction period between August 1 and October 31, 2007, rather than the EA identified date of 2005.

## **Description of Selected Action**

The Selected Action consists of removal and restoration of earthen fill facilities at three locations within the Drakes Estero Watershed. The Selected Action will remove earthen fill dam facilities to restore

natural hydrologic and shoreline process; it will replace access through or around the project areas, thereby maintaining and in some cases improving the visitor access and experience. These activities will meet state and federal fish passage guidelines, increase flow conveyance through the facilities, reduce or eliminate potential for catastrophic failure of these facilities and reduce long-term operation and maintenance.

## Limantour Beach Marsh

At the Limantour Beach Marsh site, approximately 100 linear feet of the northern (landward) end of the existing crossing embankment and much of the secondary beach access spur would be removed to accommodate bridge construction. Fill would be removed and replaced with an 8' x 100' pre-fabricated bridge with abutments placed in the existing fill footprint. The rest of the crossing and the easternmost part of the secondary beach access embankment would remain in place, although the pavement would be entirely removed. Material excavated during removal of the existing embankment would be transported to the spoils management area adjacent to the Muddy Hollow Trail, approximately 800 feet northwest of the site, where a conspicuous cut slope likely represents the original borrow area from which materials used to construct the embankment were obtained.

In order to mitigate for impacts to California red-legged frog breeding habitat, approximately 1.8 acres of habitat will be created adjacent to the project area, through excavation adjacent to existing wetland areas. These areas would be isolated from the tidal areas and would not affect connectivity of the system. Instead, these areas would be located in low-energy areas and not expected to fill up with large amounts of sediment. Digging closer to the groundwater table would allow these systems to remain wet. Freshwater would be available making this breeding habitat viable.

Overall, the actions at the Limantour Beach Marsh site would result in approximately 40 cubic yards of fill to be placed in waters or wetlands under US Army Corps jurisdiction associated with the bridge construction. Potential fill associated with the California red-legged frog habitat creation activities would affect 0.07 acres of adjacent non-tidal wetlands.

## Muddy Hollow

At Muddy Hollow, the project would entail draining the reservoir (Muddy Hollow Pond) and removing the existing earthen dam to restore full hydraulic connectivity between the upper portion of the watershed and the Estero proper. Dam removal would take place within a single construction season. Channel geometry and function are expected to evolve and re-adjust by natural processes following the restoration of drainage connectivity. A check structure or structures would be installed on the former reservoir floor to trap coarse sediment and assist the development of floodplain areas for revegetation. The dam removal will also necessitate a 1.5-mile Wilderness reroute of the Estero Trail. Activities to drain Muddy Hollow Pond would be initiated prior to August 1. Based on rainfall and runoff conditions, initiation of pond dewatering activities (using multiple siphon tubes) would likely begin in early June. These restoration activities would be followed by an adaptive management phase as the restored system readjusts and moves to a new equilibrium.

Overall, the actions at Muddy Hollow would result in approximately 100 cubic yards of fill to be placed in waters or wetlands under US Army Corps jurisdiction. This includes installation of brush or log check structures to trap coarse material and assist with floodplain development. These materials would be placed within the former ponded area. In addition, there will be some additional excavation within the formerly ponded area to create California red-legged frog habitat. The existing pond is considered jurisdictional wetland. The proposed fill would occur in the formerly ponded areas. Overall, these areas would include 0.17 acres of non-tidal jurisdictional waters, 0.001 acres of non-tidal wetlands and 0.002 acres of Section 10 wetlands. It should be noted that these areas are associated with excavation of the

dam facility. The activities identified for brush check structures and frog habitat would be conducted upstream in the formerly ponded portion of the project area.

## Glenbrook Crossing

All work elements associated with the Glenbrook Crossing work area would occur within the Philip Burton Wilderness. At the Glenbrook Crossing site, removal of the existing 25 foot high culverted embankment crossing and limited channel grading would enable readjustment of the channel via natural processes of erosion and transport. The proposed treatment focuses on removal of the features that impede natural process, and balancing cut and fill actions in the channel to reconnect the system through the project area. The extent of treatment is approximately 600 feet downstream and 200 feet upstream. Log and boulder structures would be installed to moderate the grade and provide habitat in the restored channel. Removal of this former road fill will require an approximately one-mile reroute of the Muddy Hollow Road Trail. This restoration approach limits the extent of the work footprint and promotes natural process, and is considered the minimum tool required to achieve the wilderness restoration needed. Equipment necessary to complete the work in an efficient and timely so as to promote quicker resource recovery includes excavators, bulldozers, dump trucks and other support vehicles.

Following removal of the existing embankment and culvert, sediment stored above the crossing would be removed and placed downstream in the reconstructed channel section. This balanced cut and fill approach would minimize excavation upstream approximately 100-200 linear feet. Upstream, the channel would be recontoured, with the invert elevation at the crossing site adjusted by as much as 8 feet. Material recovered from the aggraded upstream area would be used for channel recontouring below the crossing site, where onsite fill would be placed in approximately 600 linear feet of the channel, reducing the invert gradient to a slope of approximately 2% and increasing the invert elevation immediately below the crossing site by about 8 feet. While the intent of the site treatment is to balance cut and fill, any excess spoils would be managed as described above for embankment removal.

To stabilize the recontoured portion of the channel, grade control structures designed to resemble buried debris jams would be installed at intervals of approximately 100 feet, with drops of 2 feet or less between the crest of adjacent structures. Grade control structures would be installed over the entire length of the recontoured reach upstream and downstream of the crossing site. Several mature alders would likely be removed to accommodate channel earthwork. The resulting large woody material would be left in place for natural recruitment into the stream system.

This approach to restoration of a more natural channel gradient would more closely balance excavation upstream of the crossing site with fill placement downstream and would result in a reduced volume of excess spoils requiring placement in the spoils management area. Because it would reduce upstream excavation, it would also minimize intrusion into the mature, established riparian forest upstream of the crossing, allowing this living community to continue to provide channel stability as natural hydrologic and hydraulic process is reintroduced to the system.

Overall, the actions at the Glenbrook Crossing would result in approximately 4,300 cubic yards of fill to be placed in waters or wetlands under US Army Corps jurisdiction. This includes redistribution of 4,200 yards of streambed material stored upstream of the crossing and 100 cubic yards of log materials used to create woody debris structures in the channel. The proposed project actions will result in the excavation of approximately 5,500 cubic yards of road fill excavation within the project site. These actions would affect 0.19 acres of 404 jurisdictional non-tidal waters, 0.03 acres of adjacent non-tidal waters and 0.04 acres of adjacent non-tidal wetlands.

## California red-legged frog habitat conservation measures

The US Fish and Wildlife Service Biological Opinion contained several terms and conditions requiring protection of frog habitat during project construction as well as proposed conservation measures to be taken to minimize the impacts of the project. It should be noted that the Limantour Beach Pond and Muddy Hollow Pond areas represent breeding habitat and the proposed activities would result in permanent impacts to 9.8 acres, and temporary impacts to 12.78 acres of Critical Habitat. In consultation with the USFWS, the NPS has identified reasonable and prudent measures to compensate for the project impacts. These include creation of approximately 3.6 acres of breeding habitat within the Coastal Watershed Restoration Project Area (adjacent to the Limantour Beach and Muddy Hollow project sites), repair of breaches at five sites providing 7.83 acres of habitat, as well as maintenance of dams currently supporting 3.92 acres of habitat and additional protections to a 12.58 acre floodplain area with emerging California red-legged frog habitat. These actions would be implemented by the park as part of ongoing maintenance and management efforts. Based on these actions, the USFWS has determined that the project activities as proposed would not jeopardize continued existence of the species.

## Wilderness Trail Construction

Estero Trail and Muddy Hollow Road Trail reroutes, totaling approximately 2.5 miles are located in Wilderness. Activities to be conducted include site clearing/mowing and trail bench construction. In order to complete the work within given time constraints, in a manner that is consistent with landform and site conditions, the minimum tool for these efforts include chainsaw and other brushing implements, rubber tracked mower (6' width), tracked carriers and tracked bulldozer (5' wide). The Wilderness Minimum Tool evaluation was conducted as part of the project EA.

## Standard Practices

Standard Resource Protection Measures, to be implemented at each of the sites include measures to minimize erosion and sediment mobilization, revegetation measures, explicit plans to prevent and respond to chemical spills, actions to protect cultural resources, measures to minimize disruption to recreation in the Seashore, and practices to protect plant and animal life in the project area. These Resource Protection Measures would be employed by the NPS or contractor staff engaged in construction activities.

The EA documented that for all alternatives, site preparation and construction would occur between August 1 and October 31. For work to begin on site prior to August 1, nest surveys would need to be conducted one week prior to implementation to insure nests are no longer present at the site. NOAA Fisheries and Regional Water Quality Control Board identify the date of October 15. Based on review with these agencies, requests to extend the construction period to October 31 would be considered at that time. The construction window is intended to avoid disturbance of migratory bird nesting, and closes early enough to avoid the beginning of the November–April storm season. Activities to drain Muddy Hollow Pond would be initiated prior to August 1. Based on rainfall and runoff conditions, initiation of pond dewatering activities (using multiple siphon tubes) would likely begin in early June.

At each site and before construction begins, a bypass would be installed to convey streamflow around the construction area. Water pumped from the channel would be conveyed via flexible high-density polyethylene (HDPE) pipe to a temporary outfall located downstream of the project area. If pumping is necessary, it will be equipped with approved screening to prevent it from drawing in wildlife. This bypass would be maintained throughout the construction window, and discontinued when construction was complete. Aquatic species within the bypass section would be captured and moved using appropriate methods to habitat either upstream or downstream depending on local conditions.

As part of the project initiation, site topsoil and vegetation would be stockpiled. Final grading should include the use of this stockpiled topsoil to support natural revegetation at each site. Topsoiling would provide a natural seedbank and is expected to foster rapid reestablishment of vegetation. Erosion control

measures would be installed as needed on the slopes and at the toe of the slope to prevent excessive sediment runoff prior to site closeout.

As part of site closeout, revegetation and erosion control activities would be completed in disturbed areas. As part of the project initiation, site topsoil and vegetation would be stockpiled. Final grading should include the use of this stockpiled topsoil to support natural revegetation at each site. Topsoiling would provide a natural seedbank and is expected to foster rapid reestablishment of vegetation. Erosion control measures would be installed as needed on the slopes and at the toe of the slope to prevent excessive sediment runoff until vegetation reestablishes.

Adaptive monitoring and management would be conducted at the Glenbrook Crossing and Muddy Hollow restoration sites. Materials, including woody debris, would be staged and added to the channel if excessive headcutting or channel bank slope impacts are observed. In the long-term, the riparian corridor and recovery of riparian vegetation will be monitored, and determinations of necessary additional treatments would be made as necessary.

## Why the Selected Action will not have a Significant Effect

In the EA, the following impact topics were analyzed for each of the alternatives, including the no-action alternative: geology and soils; geohazard; air quality; soundscapes; water quality and streamflow characteristics; marine and estuarine resources; floodplains, wetlands, and riparian zones; rare or unusual vegetation; introduction or spread of non-native or invasive species; species of special concern and critical or essential habitat; cultural resources; public safety and transportation; recreational resources; visitor experience, and aesthetic resources. Conclusions in the EA were provided to regulatory agencies including US Army Corps of Engineers, California Coastal Commission, US Fish and Wildlife Service, National Marine Fisheries Service, San Francisco Regional Water Quality Control Board and the State Historic Preservation Office. The responses from these agencies as well as public comment on the EA are considered in this evaluation.

The FONSI includes evaluation of criteria to determine whether an impact may be significant. The EA concluded, and regulatory response supported the finding that the selected alternative would have negligible to moderate effects (both adverse and beneficial) to park resources. None of the potential impacts are considered to be significant.

The Selected Action addresses public health and safety through the removal of earthen fill infrastructure at three locations. All three facilities accommodate public access through these sites. The Glenbrook Crossing is severely compromised, and the trail located over this fill puts public health and safety at risk. The Bureau of Reclamation identified the Muddy Hollow Dam to be in "seriously deficient condition and consideration should be given to deactivating the dam and restoring the tidal pool area" (USBR 2001). While construction activities will have the potential for adverse impacts to health and safety, the removal of failing facilities and replacement of use, with trail reroutes (Muddy Hollow and Glenbrook) or a bridge (Limantour Marsh), will result in improved protection of public health and safety in the long-term.

The project is located in the Drakes Estero watershed, known to support federally threatened steelhead, as well as many other threatened or endangered species. The Estero itself is designated potential Wilderness. At these three sites, extensive earthen fill has converted habitats and dramatically altered natural process within and adjacent to Wilderness. The Selected Action intends to remove the anthropogenic fill and restore conditions so that natural hydrologic and shoreline process can persist. Secondly, these earthen facilities are degraded and are at risk of catastrophic failure. Under such conditions, failure at these sites would result in uncontrolled and unmitigated changes to the ecosystem. Overall, the Selected Action would reduce the influence of existing infrastructure on natural process benefiting stream, wetland and estuarine process.

The project is not considered controversial. The initial scoping and public release of the EA resulted in limited public response (one letter on public draft release) regarding the project actions. There is general support in the area for improvements related to ecological restoration and fish passage. The Seashore has conducted restoration of hydrologic process at this scale in the past, and is in planning phases for further work restoring estuarine and stream process. Regulatory review has been completed for the project, and all permits and concurrences allow for the Selected Action to be implemented.

The proposed actions are intended to <u>reduce</u> the risk of catastrophic failure at each of these sites. Through the project assessment and engineering phases, the park and design consultants evaluated alternatives and how those would meet project criteria. The risk and uncertainty of catastrophic failure is far greater and unknown than the potential impacts associated with the Selected Action. Based on field assessments, the potential for catastrophic failure is imminent and the planned solutions are intended to reduce potential for future impacts and are considered rather certain.

The activities identified in the Selected Action are consistent with other projects conducted or proposed within the Seashore. The sites included in this project are at risk of failure and the proposed actions are intended to plan for controlled deconstruction, thereby eliminating risk of catastrophic failure. The conversion of ecosystems from freshwater pond to tidal marsh would result in marked changes to the area, but provides for mitigation and accommodation of existing uses (e.g. trail and beach access, and California red-legged frog habitat) though the project. In the case of catastrophic failure, the existing uses and habitat values would not likely be replaced or mitigated. These actions will address all restoration needs at each site, and their impacts are not considered significant either individually or cumulatively.

Project documentation was submitted to the State Historic Preservation Office (SHPO) for NHPA Section 106 compliance. The NPS identified the potential of impacts to site CA-MRN/236-H, associated with work at the Limantour Marsh site. The NPS will delineate an exclusion area and monitor when work occurs in the general vicinity of the area. With this approach, the SHPO concurred with the NPS determination that the project would have "no adverse effect to historic resources within the project area."

Endangered Species consultation on the Selected Action was conducted with US Fish and Wildlife Service and National Marine Fisheries Service. The evaluation showed that the proposed conversion of ecosystems at Muddy Hollow and Limantour Beach Pond from freshwater pond to tidal marsh would result in impacts to freshwater aquatic species including the California red-legged frog. The US Fish and Wildlife Service concluded in their Biological Opinion that the actions would result in adverse impacts but would not jeopardize California red-legged frogs. As part of the BO, measures to mitigate for direct impacts to the frogs and their habitat are identified. These will be implemented in conjunction with the Coastal Watershed Restoration efforts. The NMFS has recommended that a vibration hammer (rather than impact hammer) be used to place piles in order to limit potential impacts of noise on aquatic species. In addition to the specific conditions above, the agency Biological Opinions identified standard practices to reduce potential construction impacts.

Regulatory review of the selected action activities was conducted as part of the compliance process. All regulatory permits and review have been received and are on record in the Seashore files. Many of the permits include standard practices to reduce impacts associated with the construction activities. These are incorporated into the Summary of Prescribed Resource Protection Measures below.

Based on the findings of the EA, as well as responses from the public and regulatory agencies, the National Park Service has concluded that the project will not have a significant effect on park resources or the environment, and that an EIS is not necessary.

	Summary of Prescribed Resource Protection Measures				
Impact	Prescribed Measure	Responsibility			
1. Natural					
Resources					
Water Resources /Water Quality	<u>Timing</u> The timing for construction will avoid direct impacts to water resources. The water level in the fall is low and restoration activities will be conducted away from surface water resources.	Contract Documents			
Water	Water Quality	Contractor			
Resources /Water Quality	Seashore staff and NPS contractors will implement the preferred alternative to abide by the following stipulations in order to protect Water Quality at and downstream of the project Sites:				
	<ul> <li>Conduct construction activities during the dry season.</li> <li>Conduct construction work in accordance with site-specific construction plans that minimize the potential for increased delivery of sediment to surface waters.</li> </ul>				
	Ensure that concentrated runoff and concentrated discharge are diverted away from channel banks.				
	<ul> <li>Minimize removal of and damage to native vegetation.</li> <li>Install temporary construction fencing to identify areas that require clearing, grading, revegetation, or recontouring, and minimize the extent of areas to be cleared, graded, recontoured, or otherwise disturbed.</li> </ul>				
	<ul> <li>Grade and stabilize spoils sites to minimize erosion and sediment input to surface waters and generation of fugitive dust (see discussions under Measures to Protect Air Quality).</li> </ul>				
	<ul> <li>As appropriate, implement erosion control measures to prevent sediment from entering surface waters, including the use of silt fencing or fiber rolls to trap sediments and erosion control blankets on slopes and channel banks.</li> </ul>				
	<ul> <li>Avoid operating equipment in flowing water by using temporary cofferdams and/or other suitable structures to divert flow around the channel and bank construction area.</li> </ul>				
Water	Spill Prevention and Response Plan	· · · · · · · · · · · · · · · · · · ·			
Resources /Water Quality	NPS will require that the construction contractor comply with spill prevention and response standards that apply to the use of hazardous and toxic materials, such as fuels and lubricants for construction equipment. NPS will oversee implementation of the spill prevention and response plan. Elements of the plan will ensure that:	Contractor			
	workers are trained to avoid and manage spills;     construction and maintenance materials are prevented from entering surface				
	waters and groundwater;				
	all spills are cleaned up immediately and appropriate agencies are notified of any spills and of the cleanup procedures employed;				
	Contractor shall have spill containment and erosion control supplies on site to facilitate quick response to unanticipated storm events or emergencies.				
	<ul> <li>staging and storage areas for equipment, materials, fuels, lubricants, solvents, and other possible contaminants are located at least 100 feet away from surface waters;</li> </ul>				
	no vehicles are fueled, lubricated, or otherwise serviced within the normal high-water area of any surface water body;				
	<ul> <li>vehicles are immediately removed from work areas if they are leaking; and</li> <li>no equipment is operated in flowing water (suitable temporary structures are</li> </ul>				

	installed to divert water around in-channel work areas).	
Vegetation		Contractor
	Measures to Protect Vegetation and Prevent the Introduction and Spread of Invasive Plant Species  BMPs to protect riparian vegetation during construction will be incorporated into	Contractor
	construction documents (plans and specifications) for the proposed action. They will include, but may not be limited to, the following:	
,	<ul> <li>Requiring the use of temporary construction fencing to delimit work areas.</li> <li>Requiring that fencing be installed before site preparation work or earthwork begins.</li> </ul>	
	<ul> <li>Excluding foot and vehicle traffic from particularly sensitive areas by delimiting exclusion areas with temporary construction fencing and flagging tape in a conspicuous color.</li> </ul>	
	<ul> <li>Washing off the tires or tracks of trucks and equipment entering and leaving project sites to prevent seed transport.</li> </ul>	
Air Quality	The NPS and its contractors will implement the following measures to control the generation of fugitive dust during site preparation and construction activities.  These measures are contained in the Bay Area Air Quality Management District's (BAAQMD's) Feasible Control Measures for PM10 Emissions¹ from Soil Removal Activities (BAAQMD 1996).	,
	Limit the area subject to excavation, grading and other construction activity at any one time.	Contractor
	<ul> <li>Water unpaved access roads, parking areas, and staging areas as necessary, or stabilize them with nontoxic soil stabilizers approved for use adjacent to surface waters.</li> </ul>	
	Apply (nontoxic) soil stabilizers to inactive earthwork areas (previously graded areas inactive for 10 days or more).	
	Enclose, cover, water, or apply nontoxic soil stabilizers to exposed stockpiles as necessary.	
	<ul> <li>Maintain properly tuned equipment and limit idling time to 5 minutes.</li> <li>Cover trucks hauling soil, sand, or other loose materials, or require them to maintain at least 2 feet of freeboard.</li> </ul>	
	<ul> <li>Replant vegetation or topsoil disturbed areas as quickly as possible.</li> <li>Limit traffic speeds on unpaved roads to 10 mph.</li> </ul>	
Wildlife	Measures for Migratory Birds To prevent disturbance of migratory birds—protected under the federal Migratory Bird Treaty Act—no project-related activities will take place during the migratory	
	bird nesting season (February 15—August 1). To provide additional assurance, the NPS will conduct preconstruction surveys for migratory birds and their nests at the	
	project site no more than 1 week prior to the initiation site preparation, staging, or construction activity planned before August 1. If preconstruction surveys identify active nests belonging to common migratory bird species, a 100-foot exclusion	Staff
	zone will be established around each nest to minimize disturbance-related impacts on nesting birds. If active nests belonging to special-status migratory birds are	

<sup>&</sup>lt;sup>1</sup> *PM10* refers to particulate matter with a diameter of 10 microns or less. Material of this size is small enough to be drawn deep into the lungs when inhaled and thus poses a human health hazard.

	identified, a no-activity buffer zone will be established around each nest. The radius of the no-activity zone and the duration of exclusion will be determined in consultation with the U.S. Fish and Wildlife Service.	
	Measures for Aquatic Species  Before de-watering activities begin at the project site, NPS will ensure that native aquatic vertebrates and larger invertebrates are relocated to a flowing channel segment by a qualified fisheries biologist. NPS will work with NOAA Fisheries to identify or develop the most appropriate relocation protocol. Construction activities will be prohibited from unnecessarily disturbing aquatic habitat.	Staff
	To ensure against adverse impacts on California red-legged frog ( <i>Rana aurora draytonii</i> ), NPS will conduct preconstruction clearance surveys for this species. The construction will occur during a period of time when frog use of these areas would be low. A biologist will survey the construction area on a daily basis to insure that frogs or other species have not moved in during the night. Frogs that have moved into the area would be captured and relocated to habitat outside of the construction area.	Staff
Special Status Species	California red-legged frog – (from USFWS BO July 19, 2006). To ensure against adverse impacts on California red-legged frog ( <i>Rana aurora draytonii</i> ), NPS will conduct preconstruction clearance surveys for this species and establish. A silt fence to delineate the work areas will be installed to exclude frogs from the project area. A biologist will survey the construction area prior to earth moving. If a frog is observed, qualified personnel will capture and move the animal(s) to an appropriate adjacent suitable habitat outside the work area (USFWS 2004).	Staff/ Contractor (Silt Fence)
	Staff will conduct a pre-construction education program for field personnel involved with the restoration project prior to groundbreaking. Information regarding description of species ecology, habitat needs, legal status, and their protection under the act, and measures to avoid impact or reduce effects to the species during the project. This will be presented by a qualified person knowledgeable of the CRLF and other appropriate species (USGS-BRD staff will brief crews on the CRLF) in an informal manner.	NPS Staff
	The actions associated with the Road Crossing Improvements Project would result in temporary impacts to approximately 1.5 acres of non-breeding habitat. Once construction is complete, the habitat in the work sites would recover and would likely be better than that currently existing. Maintenance and repair of two breached ponds on White Gate Trail would restore approximately 1.66 acres of habitat. The actions to repair these habitat areas would be conducted in conjunction with trail maintenance and minor reroute activities in the area.	NPS Staff
Soils	Some short-term impacts due to heavy equipment onsite would occur. These impacts can be mitigated by regrading and restoring disturbed areas quickly to allow regrowth of vegetation.  Erosion control on the regraded sites would include actions to break up and prevent the formation of long flow paths. Regrading actions would leave some roughness in the soil and bio-logs or similar treatments would be installed at contour to detain	Contractor
Wetland Resources	concentrated flow. Natural revegetation of the site would be augmented with shrubs recovered from the removal areas and potential reseeding with native perennial grasses.  BMPs to protect wetland resources during construction will be incorporated into construction documents (plans and specifications) for the proposed action. They	

	would include, but may not be limited to, the following.	<u>,                                     </u>
		Staff/Contractor
	Where possible, construction access and staging shall occur in uplands and non-riparian habitat.	
	<ul> <li>If construction access or staging must occur in wetlands and riparian habitat, access within these areas shall be kept to the minimum road width and acreage possible. Contractors will work with NPS personnel to minimize impacts to wetlands and riparian habitat.</li> <li>Construction access routes will be flagged to ensure that construction equipment does not detour from authorized entry points</li> </ul>	·
	and access routes.	
	<ul> <li>Where possible, construction equipment will work from upland locations to minimize impacts to wetlands and riparian habitats.</li> <li>Any temporary "fill" or staging material placed in wetlands will be removed to upland locations at the earliest possible date.</li> <li>Construction equipment will be cleaned prior to construction start to ensure that no seeds or vegetative fragments of invasive, non-native species are introduced into the Project Areas.</li> </ul>	
Wilderness	Minimum Requirements and Minimum Tool	
	Work in designated wilderness areas must comply with the minimum tool requirements as designated in the Wilderness Act. Appendix B of the Project EA presents findings of Minimum Requirements and Minimum Tool determination for the aspects of the project that occur within the Philip Burton Wilderness boundary.	
	Access and Construction	
	In addition, to ensure that wilderness values are protected, park staff would brief construction crews on procedures for operations in wilderness areas and concerns related to the wilderness, and would monitor to ensure that operations minimize impacts on wilderness values and resources. The briefing and monitoring are intended to provide an increased level of vigilance during wilderness construction.	Staff
	At the work site, the crew will establish a construction center where refueling and overnight storage will occur. This site will be within the construction zone, but at a minimum distance of 100 feet from surface water and wetland resource areas. At the construction center, a temporary containment zone would be lined with impermeable material. This material would be removed at the closeout of the construction activities at this site.	Contractor
2. Cultural Resources	The NPS will coordinate with the Federated Indians of Graton Rancheria (FIGR) to insure that either an NPS or FIGR representative regularly visits the construction site. While the project has been designed exclude work in documented resource areas, the NPS employee will be on site to insure that this is indeed the case. In the case that resources are discovered during the course of construction, the NPS will act immediately and appropriately as documented in 36 CFR 800.13 "Post-review discoveries" (http://www.achp.gov/regs.html#800.13).	Staff
3. Visual Quality	Information regarding restoration activities would be posted in the park Visitor Centers as well as adjacent to restoration sites. Explanation and education as to restoration objectives and activities would be included in these interpretive areas.	Staff
4. Health and	NPS will retain qualified geologic and geotechnical personnel to perform engineering geologic and geotechnical studies at each site during the design and	
Safety	construction phases of the proposed action, in order to ensure appropriate design for existing substrate conditions. Design recommendations will be presented to NPS in the form of written soils engineering and engineering geologic reports. The geologic and geotechnical personnel will also be responsible for monitoring	Construction Documents

	earthwork and construction to ensure compliance with applicable codes and standards and with the recommendations of the soils and engineering geologic reports.  The NPS and its contractors will require the construction contractor to prepare and implement a traffic safety plan. The traffic safety plan will address appropriate vehicle size and speed, travel routes, closure plans, detour plans (if any), flagperson requirements (if any), locations of turnouts to be constructed (if any),	Contractor
	coordination with law enforcement and fire control agencies, measures ensuring emergency access, and additional need for traffic or speed-limit signs. Delivery	
	and haulage access, including contractor mobilization and demobilization, will be	
	scheduled to minimize impacts on traffic on area roadways, including US-101.  Construction worker parking and access will be managed to avoid impeding access for park visitors and emergency vehicles.	
	In addition, the NPS is committed to the following design and construction commitments:	
	<ul> <li>Restoration and spoils disposal earthwork: Caltrans Standard Specifications (California Department of Transportation 1999).</li> <li>Structural features for water conveyance: relevant guidance of the American Waterworks Association.</li> </ul>	Construction Documents
	Other structural features, such as bridge: Uniform Building Code (International Conference of Building Officials).	;
	NPS will ensure that design and construction of project features, including earthwork and infrastructure, proceeds in accordance with the appropriate codes and standards.	
5. Noise	Seashore staff and NPS contractors will implement the following measures to reduce construction noise and lessen the impacts of noise that cannot be avoided.	
	Construction equipment will be required to have sound-control devices at least as effective as those originally provided by the manufacturer, and no equipment will be operated with an unmuffled exhaust. In general, construction will take place between 7:00 a.m. and 7:00 p.m., Monday through Saturday.	Contractor
	In addition, NPS will post signs at each restoration site and on the park website providing the name and contact information for an NPS staff member the public can contact with noise concerns. This person will be responsible for recording and monitoring complaints related to construction noise, and for ensuring that logged complaints are mitigated to the maximum extent possible. Construction times and contact information for noise concerns will also be publicized in the park newsletter.	Staff
6. Public Services	NPS will take feasible measures to minimize the effects of project construction on recreational use. Information on construction timeline and limits will be posted on the park website, distributed at the Bear Valley and Ken Patrick Visitor Centers, and posted at the construction site.	Staff
7. Economic	N/A	
	+ · · · · · · · · · · · · · · · · · · ·	

# **Summary of Public Involvement**

## **Initial Scoping**

Project scoping was conducted between February 18, 2003 and March 21, 2003. The public scoping document was mailed to the park public outreach mailing list including more than 200 recipients. Four comment letters were received. Potential impact topics that were identified through the public scoping,

including ecological restoration, recreational use, and bird use were described and addressed within the Coastal Watershed Restoration – Geomorphic Restoration Project Environmental Assessment.

## **EA Public Review Comments**

Announcement of availability of the Coastal Watershed Restoration – Geomorphic Restoration Project EA on the park web site or hardcopy by request was sent to a mailing list of approximately 200 groups and individuals on November 22, 2004. This mailing list is used (and added to as requested by the public) when EAs are made available for public review. The project EA including all its appendices, graphics, and other supporting documentation were posted on the Point Reyes National Seashore website (www.nps.gov/pore/pphtml/ documents.html), to which reviewers and interested parties were directed. Printed copies of the EA were mailed to all agencies, and 15 digital versions were provided to the California State Clearinghouse for review.

The NPS conducted public review for 51 days, with the comment period ending on January 5, 2005. One comment letter was received during this open comment period.

This comment letter clarified plant information reported as part of the Species List in Appendix A. In addition, the comments focused on potential impacts to two specific salt marsh plant species in the Muddy Hollow and Limantour Beach Marsh sites, invasive species concern, and the potential alignment of Estero Trail.

Special Status Plant Species: The activities at Muddy Hollow and Limantour Beach Marsh sites will occur adjacent to fringing tidal marsh/pickleweed habitat and have the potential to impact Point Reyes birds beak (Cordylanthus maritimus ssp paulstris) and Castilleja ambigua ssp. ambigua. The Seashore has conducted surveys of tidal salt marsh habitat and documented extensive presence of Point Reyes birds beak in salt marsh habitat of Drakes Estero and Estero de Limantour. The excavation activities would focus on the upland areas and would be bounded by the fringing marsh pickleweed/Point Reyes birds beak habitat. In addition, the proposed excavation would likely allow for expansion of the pickleweed habitat which is where the Point Reyes bird's beak is found. Delineation of the work area with flagging or silt fencing will minimize potential impacts to existing habitat. Castilleja is not a special status plant species, but would likely benefit in the same manner as Point Reyes bird's beak.

**Invasive Plant Species:** The commentor also identified a location of *Erharta erecta* adjacent to the Limantour Beach Marsh site. This area will be identified in the field, and avoided as possible to minimize potential spread of this noxious week. The Seashore has documented it in many areas, including trails and formerly disturbed areas such as the Limantour work site. Care will also be taken with respect to final grading and erosion control in disturbed areas. In the past two years, the Seashore has been working with agricultural operators in the park to develop a seed mix that includes native grassland species. In most cases, local topsoil will be spread over fill areas to provide a local seed base for natural revegetation. As appropriate, the park native seed mix will also be used.

**Trail alignment:** The project EA evaluated a broad corridor for potential Estero Trail reroute. The actual alignment of the trail will be determined in the field based on a variety of constraints. As noted in the EA, the actual alignment will minimize potential impacts to sensitive resources including wetlands and rare plant habitat. Final field surveys of the alignment will be conducted to ensure that such sensitive areas are avoided to minimize potential impact of the trail alignment.

On December 8, 2004, the State Clearinghouse initiated a 30-day comment period for State agency review (SCH#2004124002). The State Clearinghouse closed the comment period on January 5, 2005. No agencies responded, and the EA was acknowledged to have complied with State Clearinghouse requirements on January 6, 2005.

## **Required Consultation**

Consultation with state and federal agencies was initiated in January and February 2005, with letters sent to the US Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NOAA-Fisheries), California Coastal Commission (CCC), San Francisco Regional Water Quality Control Board (RWQCB), State Historic Preservation Office (SHPO), and the US Army Corps of Engineers (USACE).

## Endangered Species Act – Section 7 - USFWS

As part of the EA, a Biological Assessment was submitted to the US Fish and Wildlife Service on January 6, 2005. The Biological Assessment covered both compliance projects associated with the Coastal Watershed Restoration Project: Drakes Estero Road Crossing Improvement Project and Geomorphic Restoration Project.

The required consultation with the U.S. Fish and Wildlife Service (USFWS) was completed on July 19, 2006 with receipt of a Biological Opinion (BO) (Reference 1-1-06-F-0178) covering both projects. The BO determined that the proposed project is not likely to adversely affect the threatened West Coast Distinct Population Segment of the western snowy plover (*Charadrius alexadrinus nivosus*), endangered tidewater goby (*Eucyclogobius newberryi*), endangered California freshwater shrimp (*Syncaris pacifica*), endangered Myrtle's silverspot butterfly (*Speyeria zerene myrtleae*), Endangered Sonoma alopecurus (*Alopecurus aequalis* var. *sonomensis*), endangered beach layia (*Layia carnosa*), endangered clover lupine (*Lupinus tidestromii*), and the endangered Sonoma spineflower (*Chorizanthe valida*) due to a lack of suitable habitat. The BO concluded that the project actions, primarily associated with the Geomorphic Restoration Project activities (to be addressed as part of separate FONSI document) "is not likely to jeopardize continued existence" and "is not likely to destroy or adversely modify" habitat of California red-legged frogs."

The Biological Opinion contained several terms and conditions requiring protection of frog habitat during project construction as well as proposed conservation measures to be taken to minimize the impacts of the project. It should be noted that the Limantour Beach Pond and Muddy Hollow Pond areas represent breeding habitat and the proposed activities would result in permanent impacts to 9.8 acres, and temporary impacts to 12.78 acres of Critical Habitat. In consultation with the USFWS, the NPS has identified reasonable and prudent measures to compensate for the project impacts. These include creation of approximately 3.6 acres of breeding habitat within the Coastal Watershed Restoration Project Area (adjacent to the Limantour Beach and Muddy Hollow project sites), repair of breaches at five sites providing 7.83 acres of habitat, as well as maintenance of dams currently supporting 3.92 acres of habitat and additional protections to a 12.58 acre floodplain area with emerging California red-legged frog habitat. Based on these actions, the USFWS has determined that the project activities as proposed would not jeopardize continued existence of the species.

Endangered Species Act – Section 7 – NOAA National Marine Fisheries Service
As part of the EA, a Biological Assessment was submitted to the NOAA National Marine Fisheries
Service (NMFS) Service on January 6, 2005. The Biological Assessment covered both compliance
projects associated with the Coastal Watershed Restoration Project: Drakes Estero Road Crossing
Improvement Project and Geomorphic Restoration Project.

The NMFS responded August 31, 2006, with a Biological Opinion (Reference 2005/06969:DJL) concluding the proposed actions for the entirety of the Coastal Watershed Restoration Project "is not likely to jeopardize the continued existence of CCC steelhead, or adversely modify designated critical habitat for CCC steelhead or CCC coho salmon. NMFS anticipates that take of listed species as a result of this project will occur." The BO includes an incidental take statement.

Standard terms and conditions were included in the BO related to avoidance measures, construction window, fish handling and relocation, etc. In addition, reasonable and prudent measure 4 addresses the potential for impacts associated with pile driving as part of the Limantour Beach Marsh project site. The NMFS has recommended that a vibration hammer (rather than impact hammer) be used to place piles in order to limit potential impacts of noise on aquatic species. This can be stipulated in the construction bid package. In addition, NMFS recommends that the NPS identify other culverts or structures that may pose barriers to federally listed salmonids, and work with them to identify funding sources and collaborative partners to improve site conditions.

The review of EFH concluded that the project is likely to adversely affect EFH. NMFS recommended that specific terms and conditions of the BO incidental take statement be adopted as the EFH conservation recommendations. A response by the NPS concurring with the Conservation Recommendations has been submitted to NMFS.

## US Army Corps - Clean Water Act (CWA) Section 404 Consultation

A request for Nationwide Permit 27 was submitted to the US Army Corps on January 6, 2005. The Corps claimed jurisdiction over the project and has authorized work as proposed under Alternative C within the project EA in a letter issued September 15, 2006 (File # 27797N – Muddy Hollow; File # 27794N – Glenbrook Crossing; and File # 29149N – Limantour Beach Marsh). The US Army Corps authorization is effective upon receipt of Section 401 water quality certification from the RWQCB (issued September 22, 2006) and concurrence from the California Coastal Commission (issued February 15, 2005 ND-012-05). The Corps authorization is also conditional on the Section 7 consultation with the US Fish and Wildlife Service (BO issued July 19, 2006) and National Marine Fisheries Service (BO issued August 31, 2006).

## San Francisco Regional Water Quality Control Board - CWA Section 401 Certification

The application for water quality certification under Section 401 of the Clean Water Act was deemed complete and conditional certification to the actions identified under Alternative C, the preferred alternative, was issued September 22, 2006 (File No. 2158.04 (mll)). Conditions are identified in the certification letter included as part of the project administrative file.

## California Coastal Commission - Federal Consistency Review

The proposed project is within the California Coastal Zone and is subject to Federal Consistency Review. The CCC concurred on February 15, 2005 (ND-012-05) with the NPS negative determination that the project would not adversely affect coastal zone resources.

#### **Cultural and Historic Resources**

Consultation with SHPO was initiated March 23, 2005 for all nine sites associated with the Coastal Watershed Restoration Project – Drakes Estero Road Crossing Improvements Project and the Geomorphic Restoration Project. The SHPO staff completed their findings in a letter issued May 11, 2005, and concurred with the NPS finding of no adverse effect to historic resources within the project area. As documented in the EA, an archeological monitor will be present during the project activity near the site CA-MRN-236/H, and site fencing will exclude the site from vehicle access (Limantour Beach Marsh).

## **Impairment Statement**

The effects of the Selected Action have been analyzed for possible impairment of NPS resources as defined in the NPS Organic Act. A full analysis of potential effects of the proposed actions has determined that the project would not result in impairment of NPS resources. The project will result in short-term disturbances during the period of construction, but would improve or enhance ecological function, fish passage, flood conveyance, and estuarine condition at the three sites addressed through this

project. As identified in the EA and USFWS BO, the project would result in impacts to the federally threatened California red-legged frog and associated critical habitat. This has been determined to not jeopardize the California red-legged frog population or its critical habitat.

To assure fulfillment of the NPS mission, NPS Management Policies (NPS 2000) require decision-makers to consider impacts and determine in writing that a proposed action will not lead to an impairment of park resources and values before approving the action. The Management Policies state that impairment prohibited by the Organic Act is an impact that, in the professional judgment of the responsible NPS manager, would "harm the integrity of park resources or values, including the opportunities that would otherwise be present for the enjoyment of those resources or values." The Management Policies further provide specific guidance for NPS managers to use in analyzing whether a proposed action would result in impairment. The Management Policies state that "...an impact would be more likely to constitute an impairment to the extent that it affects a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park<sup>2</sup>;
- key to the natural or cultural integrity of the park or to the opportunities for enjoyment of the park; or
- identified as a goal in the park's general management plan or other relevant National Park Service planning documents" (NPS 2000, p. 12).

The actions proposed under this project would result in improved and more sustainable natural conditions at three locations within the Drakes Estero Watershed, with impacts limited to the short-term. In addition, these three earthen facilities are susceptible to catastrophic failure, and the proposed actions plans would eliminate potential for such failure in the future. Because the project is consistent with the park's enabling legislation, the identified goals of its General Management Plan and other planning documents, and with preserving the natural and cultural integrity and opportunities for public enjoyment of the park, it will not result in an impairment of park resources or values.

#### **Basis for the Decision**

The Selected Action accomplishes the expressed purpose and need for Coastal Watershed Restoration and is clearly superior to the continuation of current operations. While the results of the restoration activities would be visible for some years following completion of the project, the removal of these earthen dam facilities addresses the potential failure of these structures in a carefully planned manner. Removal of structural features, rather than catastrophic failure, will limit potential impacts to the project area, rather than more extensive impacts associated with a catastrophic failure. Further, the selected actions will enhance trail access and accommodate creation and protection of Critical Habitat for the California redlegged frog, which would not occur in the case of catastrophic failure. Mechanized equipment is required to accomplish the magnitude of needed Wilderness work elements (Glenbrook Crossing and all trail reroutes) in order to complete restoration tasks effectively and efficiently thereby minimizing duration of work and ensure work is completed during the dry season. Overall, while these actions may result in a short-term disturbance of Wilderness experience for a limited number of visitors, the removal of these nonconforming features (pre-dating wilderness designation), restoration of natural stream and shoreline process, and establishment of "light on the land" trail routes are essential for long-term integrity of the Wilderness. Finally, the selected actions will meet state and federal fish passage criteria and promote sustainable long-term maintenance activities which are clearly beneficial in the long term.

<sup>&</sup>lt;sup>2</sup> PRNS was established to "...to save and preserve, for the purposes of public recreation, benefit, and inspiration a portion of the diminishing seashore of the United States..." (Public Law 87-657)

Regulatory review of the preferred alternative was conducted and agencies concurred with the selected alternative, and granted permits or determinations accordingly.

The Selected Action is focused on the restoration or enhancement of natural process to promote ecological sustainability within the Seashore, consistent with NPS and park policies.

## **Finding**

In coming to its decision, the NPS considered the range of alternatives, the potential impacts that may be generated by the Selected Action, and whether to prepare a site-specific Environmental Impact Statement (EIS). The Selected Action best accomplishes the overall project objectives, in keeping with the legislated purposes and the legal mandates of the NPS. Based on this detailed review, the NPS concludes that appropriate alternatives to the Selected Action have been analyzed, and that the proposal will not generate any significant new or different environmental impacts requiring preparation of an EIS. Based on the environmental impact analysis documented in the EA, the capability of mitigations to reduce or avoid potential impacts, and with due consideration of the nature of public comment, the NPS has determined that the Selected Action is not a major federal action which could significantly affect the quality of the human environment

In conclusion, the Coastal Watershed Restoration – Geomorphic Restoration Project does not constitute an action that would normally require the preparation of an EIS. It is tiered off of, and is consistent with, the GMP. The proposal will not have a significant impact on the human environment, public health and safety, cultural resources, or federally-protected species. The Selected Action will not cause negative indirect or cumulative effects, and will not set a precedent for future actions. Implementation of the action will not violate any federal, state, or local law. Therefore, in accordance with the National Environmental Policy Act of 1969 and regulations of the Council on Environmental Quality (40 CFR 1508.9), the Selected Action to the Coastal Watershed Restoration – Geomorphic Restoration Project will be implemented as soon as practical and an environmental impact statement will not be prepared.

Recommended by: Delugate Date: 10/24/06
Superintendent, Point Reyes National Seashore

Approved by: Regional Director, Pacific West Region Date: 10/2-7/06